Buddy Garcia, Chairman Larry R. Soward, Commissioner Bryan W. Shaw, Ph.D., Commissioner Mark R. Vickery, P.G., Executive Director



# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 30, 2008

Ms. Karen McCormick On Scene Coordinator 6SF-PE U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, Texas 75202

Final Comments to the "Draft 2006 Site Investigation Report, Chemical Recycling, Inc. Re: Site, Wylie, Collin County, Texas" by Golder Associates, Inc.

Dear Ms. McCormick:

Listed below are the final comments submitted by the Texas Commission on Environmental Quality (TCEQ) on the Chemical Recycling Site Investigation Report by Golder, Associates, Inc. (Golder) dated March 26, 2007. These comments discuss the remaining issues from the TCEQ comments dated June 8, 2007 and the Golder Response to Comments dated June 21, 2007.

#### 1. Comment #1 – Classification of Groundwater as Class III.

The TCEO agrees with the determination that the correct classification of the uppermost groundwater-bearing unit at the site is Class 3 groundwater. However, Golder should either specifically identify in the report the documents containing the data that supports this conclusion or attach as an appendix to the report the supporting data for this classification. This data should include information that demonstrates that the wells are properly constructed and fully penetrate the uppermost groundwater-bearing unit. Attached information should be boring logs and construction details for the monitoring wells and also the location of the pump inlet during the re-development of the wells. The purpose of this information is to verify that the monitoring wells were constructed and that the tests were performed to maximize the potential groundwater yield of the wells constructed in the uppermost groundwater-bearing unit. Also Golder should specifically reference the document or include as an attachment the information needed to conclude that the uppermost groundwater-bearing unit is not hydraulically connected with other groundwater-bearing units or with surface water Golder should also discuss whether the



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potential exists for contaminated groundwater within the uppermost groundwater-bearing unit to discharge to surface water.

### 2. Comment #2 - Soil Source Area Size

The June 19, 2007 letter from Golder Associates indicates that "individual source areas within the site (Experimental Road) are approximately 0.5 acres in size. It is the TCEQ position that the source area should include all areas of the affected property which exceed the assessment level and not just contiguous areas when such assumption is appropriate considering the distribution of the COCs. Thus, soil PCLs should be determined using a source area size of 30 acres, rather than 0.5 acre. Additionally, the tables for screening levels were updated on April, 2008. The correct screening levels for soil source area are listed in Table A.

#### Comment #3 – Groundwater Source Area:

The groundwater source area size would be determined in the same fashion as described above for the soil source area. From examination of Figures 13, 14, and 15 in the 2006 Site Investigation Report, it appears that the affected property for groundwater exceeds 0.5 acre in size. As a result, the groundwater PCLs should be based upon a 30 acre groundwater source area. The letter from Golder and Associates is correct that the groundwater PCL would be based upon the groundwater source area size only in the circumstance where the critical (i.e., lowest) groundwater PCL for a COC is based on the AirGWInh-V exposure pathway. Generally, the critical groundwater PCL for a COC is based upon GWGWIng for Class 1 and 2 groundwater and GWGWClass3 for Class 3 groundwater. However, groundwater source area size is relevant since the critical groundwater PCLs for volatile COCs can be defined by the AirGWInh-V PCL particularly for sites, such as the Chemical Recycling Inc. site, where the groundwater source area size is set at 30 acres. Additionally, the tables for screening levels were updated on April, 2008. The correct screening levels for soil source area are listed in Table A.

## Comment #5 – Delineation of the vertical and horizontal contamination in Soils:

Since the Site investigation data is insufficient in determining the horizontal and vertical extent of contamination of the COC's in the soil, the removal work plan must contain procedures for determining the extent of contamination in the soils. Additionally, the removal work plan must specify the placement of an institutional control on the deed records to ensure future landowners are aware that use is limited to commercial/industrial activities.

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Comment #11 – Certification of closure for on-site pond:

If the pond was not certified as closed by the Texas Water Commission, the removal action must ensure that the pond area is remediated to the standards contained in the 1985 Consent Agreement.

Please contact me at 512/239-4134, if you have any questions.

Sincerely,

Marshall Cedilote, Project Manager

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State Lead Section

Remediation Division

Texas Commission on Environmental Quality

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Enc: Table A

Table A - Soil and Groundwater Screening levels.

|  | Surface Soil -<br>mg/kg | Subsurface<br>Soil -<br>mg/kg | Ground<br>water -<br>mg/L | Soils -<br>mg/kg | Ground<br>water -<br>mg/L |
|--|-------------------------|-------------------------------|---------------------------|------------------|---------------------------|
| Mercury                                  | .39                     | .39                           | 2                         | .78              | NA                        |
| Antimony                                 | 270                     | 270                           | .6                        | 15               | NA                        |
| Arsenic                                  | 200                     | 250                           | 1.0                       | 24               | NA                        |
| Barium                                   | 22,000                  | 22,000                        | . 200                     | 8000             | NA                        |
| Berylium                                 | 92                      | 92                            | .4                        | 38               | NA                        |
| Cadmium                                  | 75                      | 75                            | .5                        | 52               | NA                        |
| Chromium                                 | 57,000                  | 120,000                       | 10                        | 30,000           | NA                        |
| Copper                                   | 37,000                  | 52,000                        | 130                       | 550              | NA                        |
| Lead                                     | 150                     | 150                           | 1.5                       | 300              | NA                        |
| Nickel                                   | 7,900                   | 23,000                        | 150                       | 840              | NA                        |
| Selenium                                 | 110                     | 110                           | 5.0                       | 230              | NA                        |
| Silver                                   | 71                      | 71                            | 37                        | 48               | NA                        |
| Thallium                                 | 78                      | 87                            | .2                        | 6.3              | NA .                      |
| Zinc                                     | 250,000                 | 350,000                       | 2,200                     | 990              | NA                        |
| 1,1,1-<br>Trichloroethane                | 81                      | 81                            | 20                        | 1.6              | 20                        |
| 1,1,2,2-<br>Tetrachloroethane            | 2.6                     | 2.6                           | 1                         | .023             | 4.6                       |
| 1,1,2-<br>Trichloroethane                | 1                       | 1                             | .5                        | .02              | .5                        |
| 1,1-<br>Dichloroethane                   | 2,500                   | 2,500                         | 1,300                     | 9.2              | 240                       |
| 1,1-<br>Dichloroethene                   | 2.5                     | 2.5                           | .7                        | .05              | 7                         |
| 1,2-<br>Dichloroethane                   | .69                     | .69                           | .5                        | .13              | .5                        |
| 1,2-<br>Dichloropropane                  | 1.1                     | 1.1                           | .5                        | 18               | .5                        |
| 2-Butanone (MEK)                         | 4,400                   | 4,400                         | 4,400                     | 29               | 1500                      |
| Benzene                                  | 1.3                     | 1.3                           | .5                        | .026             | .5                        |
| Bromoform                                | 71                      | 71                            | 26                        | .55              | 12                        |
| Bromomethane                             | 16                      | 16                            | 8.3                       | .13              | 3.4                       |
| Carbon<br>tetrachloride                  | 3.1                     | 3.1                           | .5                        | .062             | .5                        |
| Chlorobenzene                            | 55                      | 55 .                          | 10                        | 1.1              | 10                        |
| Chloroethane                             | 4,600                   | 4,600                         | 2,900                     | 31               | 10                        |
| Chloroform                               | 9                       | 9                             | 4.3                       | 11               | 24                        |
| Chloromethane                            | 23                      | 23                            | 7.9                       | .41              | 7                         |
| Cis-1,3-<br>Dichloropropene              | .74                     | .74                           | .38                       | .0066            | .17                       |
| Dibromomethane<br>(Methylene<br>Bromide) | 130                     | 130                           | 27                        | 1.1              | 7                         |

Table A – Soil and Groundwater Screening levels.

|  | Surface Soil -<br>mg/kg | Subsurface<br>Soil -<br>mg/kg | Ground<br>water -<br>mg/L | Soils -<br>mg/kg | Ground<br>water -<br>mg/L |
|--|-------------------------|-------------------------------|---------------------------|------------------|---------------------------|
| Mercury                                  | .39                     | .39                           | .2                        | .78              | ÑA                        |
| Antimony                                 | 270                     | 270                           | .6                        | 15               | ŅA                        |
| Arsenic                                  | 200                     | 250                           | 1.0                       | 24               | NA                        |
| Barium                                   | 22,000                  | 22,000                        | 200                       | 8000             | NA                        |
| Berylium                                 | 92                      | 92                            | .4                        | 38               | NA                        |
| Cadmium                                  | 75                      | 75                            | .5                        | 52               | NA                        |
| Chromium                                 | 57,000                  | 120,000                       | 10                        | 30,000           | NA                        |
| Copper                                   | 37,000                  | 52,000                        | 130                       | 550              | NA                        |
| Lead                                     | 150                     | 150                           | 1.5                       | 300              | NA                        |
| Nickel                                   | 7,900                   | 23,000                        | 150                       | 840              | NA                        |
| Selenium                                 | 110                     | 110                           | 5.0                       | 230              | NA                        |
| Silver                                   | 71                      | 71                            | 37                        | 48               | NA                        |
| Thallium                                 | 78                      | 87                            | .2                        | 6.3              | NA .                      |
| Zinc                                     | 250,000                 | 350,000                       | 2,200                     | 990              | NA                        |
| 1,1,1-<br>Trichloroethane                | 81                      | 81                            | 20                        | 1.6              | 20                        |
| 1,1,2,2-<br>Tetrachloroethane            | 2.6                     | 2.6                           | 1                         | .023             | 4.6                       |
| 1,1,2-<br>Trichloroethane                | 1                       | 1                             | .5                        | .02              | .5                        |
| 1,1-<br>Dichloroethane                   | 2,500                   | 2,500                         | 1,300                     | 9.2              | 240                       |
| 1,1-<br>Dichloroethene                   | 2,5                     | 2.5                           | .7                        | .05              | .7                        |
| 1,2-<br>Dichloroethane                   | .69                     | .69                           | .5                        | .13              | .5                        |
| 1,2-<br>Dichloropropane                  | 1.1                     | 1.1                           | .5                        | 18               | .5                        |
| 2-Butanone<br>(MEK)                      | 4,400                   | 4,400                         | 4,400                     | 29               | 1500                      |
| Benzene                                  | 1.3                     | 1.3                           | .5                        | .026             | .5                        |
| Bromoform                                | 71                      | 71                            | 26                        | .55              | 12                        |
| Bromomethane                             | 16                      | 16                            | 8.3                       | .13              | 3.4                       |
| Carbon<br>tetrachloride                  | 3.1                     | 3.1                           | .5                        | .062             | .5                        |
| Chlorobenzene                            | 55                      | 55                            | 10                        | 1.1              | 10                        |
| Chloroethane                             | 4,600                   | 4,600                         | 2,900                     | 31               | 10                        |
| Chloroform                               | 9                       | 9                             | 4.3                       | 1                | 24                        |
| Chloromethane                            | 23                      | 23                            | 7.9                       | .41              | 7                         |
| Cis-1,3-<br>Dichloropropene              | .74                     | .74                           | .38                       | .0066            | .17                       |
| Dibromomethane<br>(Methylene<br>Bromide) | 130                     | 130                           | 27                        | 1.1              | 7                         |

|                               | Surface Soil –<br>mg/kg | Subsurface<br>Soil -<br>mg/kg | Ground<br>water -<br>mg/L | Soils -<br>mg/kg | Ground<br>water -<br>mg/L |
|-------------------------------|-------------------------|-------------------------------|---------------------------|------------------|---------------------------|
| Ethylbenzene                  | 380                     | 380                           | 70                        | 7.6              | 70                        |
| Tetrachloroethene             | 2.5                     | 2.5                           | .5                        | .05              | .5                        |
| Toluene                       | 410 .                   | . 410                         | 100                       | 8.2              | 10                        |
| Trans-1,2-<br>Dichloroethene  | 25                      | 25                            | 10                        | .49              | 10                        |
| Trans-1,3-<br>Dichloropropene | 4                       | 4                             | 2                         | .036             | .91                       |
| Trichloroethene               | 1.7                     | 1.7                           | .5                        | .034             | .5                        |
| Vinyl Chloride                | 1.1                     | 1.1                           | .2                        | .022             | .2                        |
| Xylenes, Total                | 1,100                   | 1,100                         | 1,000                     | 120              | 10                        |

"NA" means that the proposed screening values for metals in groundwater are not available in the 2006 Site Investigation Report